

What is claimed is:

1. An internal gear oil pump rotor assembly, comprising:
an inner rotor having “Zi” external teeth with trochoid tooth profiles; and
an outer rotor having “Zo” internal teeth which are engageable with the
external teeth,
wherein the oil pump rotor assembly is used in an oil pump which further
includes a casing having a suction port for drawing fluid and a discharge port for
discharging fluid are formed, and which conveys fluid by drawing and discharging fluid
by volume change of cells formed between the inner rotor and the outer rotor produced
by relative rotation between the inner rotor and the outer rotor engaging each other, and
wherein the number of teeth “Zi” of the inner rotor is set to be equal to or
fewer than “6”, and a ratio S_i/S_o is set so as to satisfy the following inequalities:
 $0.8 \leq S_i/S_o \leq 1.3$, where S_i is a cross-sectional area of one external tooth which is formed
outside a root circle that is formed along the bottoms of the external teeth of the inner
rotor, and S_o is a cross-sectional area of one internal tooth which is formed inside a root
circle that is formed along the bottoms of the internal teeth of the outer rotor.